In the United States Court of Federal Claims

No. 23-889C (Filed: January 14, 2025) **FOR PUBLICATION**

EMERGENCY ALERTS	*
INNOVATIONS, LLC,	*
	*
Plaintiff,	*
	*
v.	*
	*
THE UNITED STATES,	*
	*
Defendant.	*
	*

Alison A. Richards, Global IP Law Group, LLC, Chicago, IL, for Plaintiff.

Grant D. Johnson, Trial Attorney, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, D.C., for Defendant. With him on the briefs are Brian M. Boynton, Principal Deputy Assistant Attorney General, Scott Bolden, Acting Director, and Philip Charles Sternhell, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, D.C.

OPINION AND ORDER

Plaintiff Emergency Alerts Innovations, LLC ("Emergency Alerts") brings an action for patent infringement against the United States for alleged use of technology covered by Plaintiff's U.S. Patent No. 8,391,826 ("the '826 Patent" or "Patent"). Second Am. Compl. (ECF 11). Plaintiff alleges that the patented technology is currently used by wireless carriers to send emergency alerts to their customers with the authorization and consent of the United States. *Id.* at 1.

Defendant has moved to dismiss the case for failure to state a claim upon which relief can be granted, alleging that the relevant claims of the '826 Patent involve patent-ineligible subject matter. Def.'s Mot. (ECF 14); see 35 U.S.C. § 101; RCFC 12(b)(6). The motion is fully briefed, and I have heard argument. Defendant's motion is **DENIED**.

¹ Pl.'s Opp. (ECF 17); Def.'s Reply (ECF 18); Pl.'s Suppl. (ECF 20); Def.'s Suppl. (ECF 22); Pl.'s Notice Add. Auth. (ECF 23); Def.'s Resp. Add. Auth. (ECF 24); Transcript ("Tr.") (ECF 26).

BACKGROUND

I. The '826 Patent

The '826 Patent, which was filed in 2008 and issued in 2013, is titled "System for controlling the operation of wireless multicasting systems to distribute an alarm indication to a dynamically configured coverage area." Second Am. Compl. ¶ 26; see id. Ex. 1 ("Patent") (ECF 11-1). The claims of the '826 Patent relevant here are independent claim 12 and dependent claims 14, 17, and 18. Second Am. Compl. ¶¶ 11, 21. Those claims assert a method for operating a "Reverse 911 Alarm System," that is, a system for sending emergency information from a dispatcher to wireless devices (such as mobile telephones) within a defined area. See id. ¶¶ 7–8; Patent 2:50–:58. The patented technology works, roughly speaking, through a three-part process. See Second Am. Compl. ¶ 8.2

First, when a hazard has been identified, a "human operator" defines a coverage area. *Id.* ¶ 15; Patent Fig. 5, 18:1–:6 (Claim 17). This requires defining the geographical extent of the hazard and listing active cell sites in the area using a "mapping database." Patent 11:53–:56, 12:48–:51, 13:20–:47, 16:50–:54 (Claim 12); Tr. at 7–8. The coverage area can be defined "dynamically"; that is, it can be set to include the area where a hazard exists as well as separate, "not coextensive" areas where the hazard might spread, and it can be adjusted over time as conditions change. Second Am. Compl. ¶ 16; Patent 3:11–:17, 12:45–:48, 16:50–:54 (Claim 12), 17:20–:24 (Claim 14).

Second, the emergency alert system identifies the cellular communication devices that are in the coverage area. Second Am. Compl. ¶ 12; Patent Fig. 4 (step 403), Fig. 5 (step 402), 12:7–:9, 16:59–:63 (Claim 12). Once the cell sites correlated with the hazardous event are identified, data defining the extent of the hazardous event are sent to "Mobile Switching Centers," Patent 13:36–:38, each of which covers one or more cell sites, Patent 6:50–:51. The mobile switching centers "can identify, via GPS data received from the wireless subscriber devices operating in the coverage areas of cell sites, which wireless subscriber devices [] are located in the area impacted by the Hazardous Event[.]" Patent 13:39–:43; see also Patent 12:7–:9, 16:55–:62 (Claim 12); Second Am. Compl ¶ 16.

Third, the mobile switching centers direct cell sites in the coverage area to transmit the desired warning to all the identified devices simultaneously. Patent Fig. 4 (step 406), Fig. 5 (step 405), 13:43–:48, 16:63–17:3 (Claim 12), 18:9–:13 (Claim 18).

² The parts do not correlate exactly to the step-by-step method the Patent describes. *Cf.* Patent Fig. 5. Instead, they reflect the functional elements of the method that are relevant to its patent eligibility. *See* Tr. at 4.

The '826 Patent refers to that simultaneous transmission as "multicasting." Second Am. Compl. ¶ 20; Patent 7:65–8:1 (defining a multicast as "multi-media content that is concurrently delivered in a single transmission to a plurality of subscribers who are equipped with wireless subscriber devices"). In a multicast, "multiple subscribers share a single air interface channel ... to concurrently receive the multi-media content on the same channel." Patent 8:2–:8. Devices that receive a multicast can also send information back to the transmitter. Patent 8:20–:26. The multicast takes place over "the existing cellular communication network and/or wireless-based Local Area Networks which are operational in the coverage area of the hazard." Second Am. Compl ¶ 8. "[C]oncurrently transmitting" the alarm via a single multicast, rather than by "then-existing alarm systems" which required "one-to-one connections," allegedly lessens the alert's burden on telecommunications infrastructure. *Id.* ¶¶ 17–18.

The '826 Patent provides, by way of example, "exemplary multicast technology ... described in detail in U.S. Pat. No. 6,594,498 and U.S. Pat. No. 6,681,115," suggesting that the referenced technology could be used to "implement the multicast communications" as proposed by the '826 Patent. Patent 8:8—:20. In addition, the '826 Patent refers to a Patent Cooperation Treaty Application No. US07/77409 as an example of technology that enables communication in both directions between the transmitter and the receiving device, unlike prior "pseudo-multicast delivery" which allowed only for unidirectional, forward path delivery. Patent 9:7—:25; see Def.'s Mot. Ex. B, at A020–21 (ECF 14-1). The 77409 Patent application disclosed that it relied on "methods well understood in the art" — such as selecting recipients from a database or by GPS position mapping — to identify recipient end users. Def.'s Mot. Ex. B, at A024.

II. Alleged Infringement

In 2006, two years before the '826 Patent was filed, Congress passed the Warning, Alert, and Response Network ("WARN") Act. Def.'s Mot. at 2; see WARN Act, Pub. L. No. 109-347, 120 Stat. 1936 (2006) (amended by Pub. L. No. 116-283, 134 Stat. 1388 (2021), and Pub. L. No. 117-286, 136 Stat. 4196 (2022)); see also 47 U.S.C. §§ 1201–06 (codifying the WARN Act in relevant part). That Act "directed the Government to establish a system for distributing emergency alert messages via United States cellular networks to smartphones and other mobile devices." Def.'s Mot. at 2. That system is now operational and is called the Wireless Emergency Alerts ("WEA") system. *Id*.

In the WEA system, a human operator creates an alert, which is then disseminated through the Integrated Public Alert and Warning System ("IPAWS"),

operated by the Federal Emergency Management Agency ("FEMA"). Second Am. Compl. $\P\P$ 36, 45. The operator can designate a geographic area for the alert and can change the geographic area as the relevant hazard develops. *Id.* \P 46. Many nationwide and regional cellular carriers voluntarily participate in the WEA system. *Id.* \P 38.

Early versions of the WEA system could only limit their alert dissemination areas to regions as large as counties. *Id.* ¶ 37. But beginning November 2017, the system became significantly more accurate. *Id.* The WEA system is now able to deliver alerts to the targeted area "with no more than a [one-tenth] of a mile overshoot." *Id.* ¶ 21 (quoting id. Ex. 2, at 4 (ECF 11-2)).

This enhanced geographical accuracy was made possible by technological improvements in IPAWS. Id. ¶ 37. Mobile smartphones now determine their own location using "assisted GPS" technology that combines GPS with "network resources from the cellular network operator" to achieve very precise geo-targeting capabilities. Id. ¶ 23. "Assisted GPS" capable smartphones rely on mobile service providers to download and store satellite information in a database, which the phones can then connect to using the mobile service provider's network. Second Am. Compl. at 9 n.1. Downloading the stored information allows for more precise GPS capabilities even in poor satellite signal conditions. Id. The assisted GPS capability began to become broadly available in mobile phones in the mid-2010s and was supported by 60% of smartphones as of 2022. Second Am. Compl. Ex. 3, at 3 (ECF 11-3).

III. Procedural History

Plaintiff originally filed five patent infringement complaints against "wireless telecommunications carriers Verizon, AT&T, T-Mobile, US Cellular, and Cellcom" in July 2022. Second Am. Compl. ¶ 28.³ Plaintiff alleged that the carriers infringed the '826 Patent through participation in the WEA system.

About two months later, before the defendants answered, Plaintiff voluntarily dismissed its suits against US Cellular and Cellcom.⁴ And one month after that, the remaining three cases were consolidated.⁵ In April 2023, Plaintiff reached an

³ Emergency Alerts Innovations, LLC v. Cellco P'ship, d/b/a Verizon Wireless, No. 2:22-cv-270 (E.D. Tex.); Emergency Alerts Innovations, LLC v. AT&T Mobility LLC, No. 2:22-cv-268 (E.D. Tex.); Emergency Alerts Innovations, LLC v. T-Mobile US, Inc., No. 2:22-cv-269 (E.D. Tex.); Emergency Alerts Innovations, LLC v. United States Cellular Corp., No. 1:22-cv-3738 (N.D. Ill.); Emergency Alerts Innovations, LLC v. New-Cell LLC d/b/a Cellcom, No. 2:22-cv-824 (E.D. Wis.).

⁴ Emergency Alerts Innovations, LLC v. United States Cellular Corp., No. 1:22-cv-3738 (N.D. Ill. 2022) (ECF 18); Emergency Alerts Innovations, LLC v. New-Cell LLC d/b/a Cellcom, No. 2:22-cv-824 (E.D. Wis. 2022) (ECF 17).

⁵ Emergency Alerts Innovations, LLC v. Cellco P'ship, d/b/a Verizon Wireless, No. 2:22-cv-270 (E.D. Tex. 2022) (ECF 26) (consolidating Emergency Alerts Innovations, LLC v. AT&T Mobility LLC, No.

agreement to suspend litigation against AT&T and Verizon Wireless and the cases were dismissed.⁶ That left a single complaint against T-Mobile.

On May 16, 2023, the United States filed a "Statement of Interest." *Emergency Alerts Innovations, LLC v. Cellco P'ship d/b/a Verizon Wireless*, No. 2:22-cv-270 (E.D. Tex. 2023) (ECF 60); Second Am. Compl. Ex. 5 ("Statement of Interest") (ECF 11-5). The government explained that because T-Mobile's transmission of wireless emergency alerts was for the government and with the government's authorization and consent, Plaintiff's infringement claim lay against the government, not the private carriers, and could only be brought in this Court. Statement of Interest at 1–3; see 28 U.S.C. § 1498(a) (discussed further below).

Plaintiff then voluntarily dismissed its claims against T-Mobile. See Stipulation of Dismissal, Emergency Alerts Innovations, LLC v. Cellco P'ship d/b/a Verizon Wireless, No. 2:22-cv-270 (E.D. Tex. 2023) (ECF 63). This litigation follows.

DISCUSSION

I. Jurisdiction

Under 28 U.S.C. § 1498(a), this Court has exclusive jurisdiction over patent infringement suits brought by a United States patent owner seeking compensation for the unauthorized use of the patent by the government. *Zoltek Corp. v. United States*, 672 F.3d 1309, 1318 (Fed. Cir. 2012); *Golden v. United States*, 955 F.3d 981, 986–87 (2020). When the invention has been used by a private party and not by the United States directly, the owner may still sue the United States in this Court if the use was allegedly (1) "for" the United States and (2) "with the authorization or consent" of the United States. 28 U.S.C. § 1498(a); *Zoltek Corp.*, 672 F.3d at 1316. When these requirements are met, the statute "functions not only as a waiver of sovereign immunity but also as consent to liability." *Advanced Software Design Corp. v. FRB of St. Louis*, 583 F.3d 1371, 1378 (Fed. Cir. 2009).

Though the parties here do not contest subject matter jurisdiction, I nonetheless have an independent obligation to ascertain the Court's jurisdiction. *Henderson ex rel. Henderson v. Shinseki*, 562 U.S. 428, 434–35 (2011) (noting that "federal courts have an independent obligation to ensure that they do not exceed the scope of their jurisdiction, and therefore they must raise and decide jurisdictional

^{2:22-}cv-268 (E.D. Tex.), and *Emergency Alerts Innovations, LLC v. T-Mobile US, Inc.*, No. 2:22-cv-269 (E.D. Tex.)).

⁶ Emergency Alerts Innovations, LLC v. AT&T Mobility LLC, No. 2:22-cv-268 (E.D. Tex. 2023) (ECF 25); Emergency Alerts Innovations, LLC v. Cellco P'ship, d/b/a Verizon Wireless, No. 2:22-cv-270 (E.D. Tex. 2023) (ECF 58).

⁷ Plaintiff alleges that it owns the Patent. Second Am. Compl. ¶¶ 26–27.

questions that the parties either overlook or elect not to press"). A "lack of jurisdiction over the subject matter cannot be waived or overcome by the agreement of the parties." Rolls-Royce Ltd., Derby, Eng. v. United States, 176 Ct. Cl. 694, 702 (1966). Nevertheless, when ascertaining jurisdiction on a motion to dismiss, this Court "accepts as true all uncontroverted factual allegations in the complaint and construes them in the light most favorable to the plaintiff." Aries Constr. Corp. v. United States, 164 Fed. Cl. 290, 293 (2023) (quoting Estes Exp. Lines v. United States, 739 F.3d 689, 692 (Fed. Cir. 2014) (itself citing Cedars-Sinai Med. Ctr. v. Watkins, 11 F.3d 1573, 1583–84 (Fed. Cir. 1993))); see Didley v. United States, 173 Fed. Cl. 170, 173 n.2 (2024). Documents integral to and attached to the complaint are deemed incorporated into the pleadings. Insight Pub. Sector, Inc. v. United States, 157 Fed. Cl. 398, 408 (2021); see RCFC 10(c) ("A copy of a written instrument that is an exhibit to a pleading is part of the pleading for all purposes."). The complaint attaches a copy of the government's Statement of Interest, Second Am. Compl. Ex. 5, wherein the government conceded that the Section 1498(a) standards were met. Statement of Interest at 11. Thus, the question is whether the uncontroverted factual allegations in the complaint, including the Statement of Interest, are sufficient under Section 1498(a) to support an inference that the Court has jurisdiction. See Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) ("A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged."); Golden v. United States, 137 Fed. Cl. 155, 177 (2018).

As to the first requirement, use of a patent is "for" the United States when it is undertaken for the United States' benefit. *Hughes Aircraft Co. v. United States*, 209 Ct. Cl. 446, 459 (1976). Here, Plaintiff alleges that private cellular carriers send WEAs from governmental alerting entities to their customers over their cellular network, following the regulations set forth by the Federal Communications Commission and FEMA. Second Am. Compl. ¶ 36; *see also* Statement of Interest at 9. That permits an inference, as the government conceded in its Statement of Interest, that the "allegedly infringing ... use is 'for the benefit of the Government' and not merely an incidental benefit from private activity." Statement of Interest at 6, 9 (quoting *IRIS Corp. v. Japan Airlines Corp.*, 769 F.3d 1359, 1362 (Fed. Cir. 2014)); *see, e.g., Advanced Software*, 583 F.3d at 1376–79 (finding a use to be "for the government" when the United States Treasury required privately owned banks to use a new "seal encoding" method to identify fraudulent bank checks).

As to the second requirement, "authorization or consent requires explicit acts or extrinsic evidence sufficient to prove the government's intention to accept liability for a specific act of infringement." *Larson v. United States*, 26 Cl. Ct. 365, 369–70

(1992) (quoting Auerbach v. Sverdrup Corp, 829 F.2d 175, 177 (D.C. Cir. 1987)). "In proper circumstances, Government authorization can be implied." TVI Energy Corp. v. Blane, 806 F.2d 1057, 1060 (Fed. Cir. 1986). Here, the government's Statement of Interest recited the government's intent "to relieve [the wireless carrier] of any liability for patent infringement resulting from the transmission of WEAs and to transfer to the United States any liability for use of the inventions ... resulting for the authorized and consented acts." Second Am. Compl. ¶ 33 (quoting Statement of Interest at 2). The government also described how the allegedly infringing activity took place at the government's direction, to the government's specifications, and with the government's participation. Statement of Interest at 10–11. That easily supports the inference that the government gave its authorization and consent.

II. Merits

A. Legal Standard

Inventors can obtain United States patents for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof[.]" 35 U.S.C. § 101. But the Supreme Court has identified some subjects that are ineligible for patent protection: namely, "[l]aws of nature, natural phenomena, and abstract ideas." Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 216 (2014) (quoting Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576, 589 (2013) (itself quoting Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc., 566 U.S. 66, 70 (2012))). Those ineligible subjects are the "basic tools of scientific and technological work" forming the "building blocks of human ingenuity," and so should not be monopolized in a manner that would impede innovation. Id. (quoting Myriad, 569 U.S. at 589; and citing Mayo, 566 U.S. at 85). Here, the government argues that the '826 Patent claims patent-ineligible abstract ideas. Def.'s Mot. at 18–25, 27.

The patent eligibility exception for abstract ideas "embodies the longstanding rule that an idea of itself is not patentable." *Alice*, 573 U.S. at 218 (quotes and alteration omitted) (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (itself quoting *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874))). An abstract idea, for patent eligibility purposes, is a "principle," "a fundamental truth; an original cause; [or] a motive" in which there can be found no exclusive right to patent. *Id.* (quoting *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853)). The Federal Circuit has not attempted a comprehensive definition of "abstract idea," and has instead urged courts to approach the issue in a "common law" fashion, *i.e.*, "to examine earlier cases in which a similar or parallel descriptive nature can be seen — what prior cases were about, and which way they were decided." *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300 (Fed. Cir. 2016).

Courts use the two-part "Alice/Mayo test" to determine whether a patent claims ineligible material, including abstract ideas. Chewy, Inc. v. Int'l Bus. Machines Corp., 94 F.4th 1354, 1365 (Fed. Cir. 2024); see Alice, 573 U.S. 208; Mayo, 566 U.S. 66. The two steps overlap with each other to an extent. Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016); Broadband iTV, Inc. v. Amazon.com, Inc., 113 F.4th 1359, 1369 (Fed. Cir. 2024). They also share some features with the separate analyses for patent validity. Mayo, 566 U.S. at 90. But leaving those ambiguities aside, the test proceeds as follows.

Step one of the *Alice/Mayo* test asks whether a patent claim is "directed to" a category of patent-ineligible subject matter. *Chewy*, 94 F.4th at 1365 (quoting *Alice*, 573 U.S. at 217–18). The "directed to" inquiry looks at the "focus" of the claims and "their character as a whole." *Elec. Power Grp.*, 830 F.3d at 1353 (internal quotes omitted) (quoting *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016)). Mere involvement of patent-ineligible concepts does not necessarily mean that the patent is directed to ineligible subject matter. *Alice*, 573 U.S. at 217; *see also In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016).

If the court finds that a patent claim is directed to a patent ineligible subject, the analysis moves to step two of the *Alice/Mayo* test. At step two, the court looks "more precisely at what the claim elements add," *Elec. Power Grp.*, 830 F.3d at 1353, and asks whether the patent — despite being directed towards an ineligible category — "contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Chewy*, 94 F.4th at 1365 (internal quotes omitted) (quoting *Alice*, 573 U.S. at 221 (itself quoting *Mayo*, 566 U.S. at 72)).

A claim contains an "inventive concept" when it proposes a significant improvement to a technological process over the prior art, Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc., 827 F.3d 1042, 1047 (Fed. Cir. 2016), or "when the claims solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner," Amdocs (Isr.) Ltd., 841 F.3d at 1300. The inventive concept "must be enough to transform an abstract idea into a patent-eligible invention." Cellspin Soft, Inc. v. Fitbit, Inc., 927 F.3d 1306, 1316 (Fed. Cir. 2019) (quotes and emphasis omitted) (quoting Alice, 573 U.S. at 226 (itself quoting Mayo, 566 U.S. at 77)). Claims that merely recite "well-understood, routine, conventional activity," Affinity Labs of Tex., LLC v. DIRECTV, LLC, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (quoting Mayo, 566 U.S. at 73), or that simply apply "an abstract idea using conventional and well-understood techniques" are insufficient to transform the idea into a patent-eligible application, Cellspin, 927 F.3d at 1316 (quoting BSG Tech LLC v. Buyseasons, Inc., 899 F.3d 1281, 1290–91 (Fed. Cir. 2018)). "[C]laims that are 'so result-focused, so functional, as to effectively cover any solution to an identified

problem' are frequently held ineligible under section 101." *Affinity Labs*, 838 F.3d at 1265 (quoting *Elec. Power Grp.*, 830 F.3d at 1356).

Defendant moves to dismiss the case for failure to state a claim upon which relief can be granted. Def.'s Mot. at 5; see RCFC 12(b)(6). When resolving motions to dismiss under RCFC 12(b)(6), this Court evaluates whether a complaint's well-pleaded facts support a facially plausible claim to relief. Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007); e-Numerate Sols., Inc. v. United States, 149 Fed. Cl. 563, 572 (2020).

When reviewing the sufficiency of a complaint, factual pleadings are presumed true; legal claims are not. *Am. Bankers Ass'n v. United States*, 932 F.3d 1375, 1380 (Fed. Cir. 2019). A court will make all reasonable inferences in favor of the plaintiff. *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1347 (Fed. Cir. 2018); *Cambridge v. United States*, 558 F.3d 1331, 1335 (Fed. Cir. 2009). A complaint's factual claims include exhibits attached to the complaint that are integral to the complaint's claims. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) ("[S]ources properly considered on a motion to dismiss" include "the complaint, the patent, and materials subject to judicial notice."); *see also Sharifi v. United States*, 987 F.3d 1063, 1067 (Fed. Cir. 2021) ("The exhibits attached ... to his amended complaint are not 'matters outside the pleadings' that require the Claims Court to treat a Rule 12(b)(6) motion as a motion for summary judgment.").

Whether a patent claims patent-eligible subject matter is a question of law that turns on underlying factual questions. *Aatrix Software*, 882 F.3d at 1128; *MyMail*, *Ltd. v. ooVoo*, *LLC*, 934 F.3d 1373, 1379 (Fed. Cir. 2019). For purposes of a motion to dismiss, this Court therefore must consider whether the facts pleaded in the complaint, taken as true, support a plausible inference that the '826 Patent either (1) is not directed at an abstract idea, or, in the alternative, (2) contains an inventive concept. *Affinity Labs*, 838 F.3d at 1257. "If there are claim construction disputes ... either the court must proceed by adopting the non-moving party's constructions, or the court must resolve the disputes to whatever extent is needed to conduct the § 101 analysis, which may well be less than a full, formal claim construction." *Aatrix Software*, 882 F.3d at 1125 (internal citations omitted).

B. Analysis

Although the '826 Patent may be directed toward a patent-ineligible abstract idea, I cannot conclude based on the pleadings that it lacks an inventive concept. The motion to dismiss must therefore be denied.

At step one of the *Alice/Mayo* analysis, Defendant contends that the '826 Patent is directed towards "the abstract idea of targeting an alarm to individuals

based on their geographic location." Def.'s Mot. at 16–17. Plaintiff responds that the '826 Patent instead presents "specific approaches" to improving prior emergency alert systems. Pl.'s Opp. at 14.

When a patent claims a process involving electronic systems, the crux of the "directed to" inquiry is whether the patent is directed toward "a specific asserted improvement in computer capabilities" or "an abstract idea for which computers are invoked merely as a tool." BSG Tech, 899 F.3d at 1285–86 (internal quotes omitted) (quoting Enfish, 822 F.3d at 1336). "[R]esult-orientated, functional language" that omits "specific requirements as to how these steps ... are performed" is indicative of a claim directed to an abstract idea. Mobile Acuity Ltd. v. Blippar Ltd., 110 F.4th 1280, 1292–93 (Fed. Cir. 2024). Without an improvement in the technology itself, even if the patent describes a "highly specific method" for implementing an abstract idea, the patent remains "directed to that abstract idea." See Bridge & Post, Inc v. Verizon Commc'ns, Inc, 778 F. App'x 882, 889 (Fed. Cir. 2019). Neither "mere automation of manual processes using generic computers" nor "communication between previously unconnected systems" amounts to "a patentable improvement in computer technology." Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1055 (Fed. Cir. 2017) (quotes omitted). Step one of the Alice/Mayo analysis may be completed on the basis of the intrinsic record alone, without evaluation of prior art. CardioNet, LLC v. InfoBionic, Inc. 955 F.3d 1358, 1372 (Fed. Cir. 2020); see Broadband iTV, 113 F.4th at 1367.

The Federal Circuit has held on multiple occasions that patents claiming methods for getting relevant information to relevant people (and not to other people) were directed toward an abstract idea. See Free Stream Media Corp. v. Alphonso Inc., 996 F.3d 1355, 1362, 1365 (Fed. Cir. 2021); Bridge & Post, 778 F. App'x at 886–88; see also Affinity Labs, 838 F.3d at 1265; Intell. Ventures I LLC v. Cap. One Bank (USA), 792 F.3d 1363, 1371 (Fed. Cir. 2015). Those cases considered patented methods for gathering data about individuals, tailoring a new piece of information for those individuals based on the previously gathered data, and then sending that new piece of information to the individuals. Free Stream, 996 F.3d at 1361–62; Bridge & Post, 778 F. App'x at 887–88 (citing Intell. Ventures I, 792 F.3d at 1369); Affinity Labs, 838 F.3d at 1258. The Federal Circuit has also concluded that patents claiming methods "of providing particularized information to individuals based on their locations[] to be abstract." Beteiro, LLC v. DraftKings Inc., 104 F.4th 1350, 1356 (2024) (citing Affinity Labs, 838 F.3d at 1258; Intell. Ventures I, 792 F.3d at 1369; and Amdocs (Isr.) Ltd., 841 F.3d at 1295).

Here, the claims of the '826 Patent "exhibit several features that are well-settled indicators of abstractness. First, the claims broadly recite generic steps of a

kind" that this Court and the Federal Circuit "have frequently held are abstract," see Beteiro, 104 F.4th at 1355, such as generating an alarm, defining a coverage area, transmitting the alarm to cell site controllers, identifying active cellular communication devices in the cell site, and transmitting the alarm via multicast. Compare Patent 16:39–17:3 (Claim 12) with Beteiro, 104 F.4th at 1355 ("detecting information, generating and transmitting a notification based on this information, receiving a message [], determining [], and processing information []" are generic steps associated with abstract claims) (citing AI Visualize, Inc. v. Nuance Commc'ns, Inc., 97 F.4th 1371, 1378 (Fed. Cir. 2024); Elec. Power Grp., 830 F.3d at 1354; Intell. Ventures I, 792 F.3d at 1369; and buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1355 (Fed. Cir. 2014)).

Second, the point of the '826 Patent, delivering emergency warnings to people in a targeted area, is essentially the same as many others found to be directed at an abstract idea. See Second Am. Compl. ¶ 8; Tr. at 29–31. Although Plaintiff seems to urge that Free Stream, Bridge & Post, and Affinity Labs are distinguishable because they perform the "targeting certain users" function in the advertising or broadcast television context, Pl.'s Opp. at 17–19, limiting an abstract claim to one special context or other does not make the claim non-abstract. See Elec. Power Grp., 830 F.3d at 1354; Affinity Labs, 838 F.3d at 1258–59. The '826 Patent is precisely a "method[] of providing particularized information to individuals based on their locations." Beteiro, 104 F.4th at 1356; see also Chamberlain Grp., Inc. v. Techtronic Indus. Co., 935 F.3d 1341, 1347 (Fed. Cir. 2019) (holding that "the broad concept of communicating information wirelessly, without more, is an abstract idea") (citing Affinity Labs, 838 F.3d at 1269).

All patents, of course, incorporate an abstract idea to some extent. *Alice*, 573 U.S. at 217. The harder question is whether the '826 Patent asserts specific technological improvements that implement the abstract idea. That question bears not only on whether the Patent is "directed to" the abstract idea at *Alice/Mayo* step one, *see BSG Tech*, 899 F.3d at 1286; *EcoServices*, *LLC* v. *Certified Aviation Servs.*, *LLC*, 830 F. App'x 634, 642 (Fed. Cir. 2020), but also on step two, which I turn to now. *See Broadband iTV*, 113 F.4th at 1369.

Alice/Mayo step two asks whether, if the patent is directed towards a patent-ineligible concept, the patent nonetheless claims an inventive concept. Alice, 573 U.S. at 217–18, 221. The inventive concept may present itself in one of the patent's elements taken individually, or in the "ordered combination" of all the claim's elements. BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1347 (Fed. Cir. 2016); Cellspin, 927 F.3d at 1316. Whether a patent claim has "an inventive concept that renders [it] 'significantly more' than an abstract idea to which

it is directed is a question of law that may include underlying factual determinations." *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 773 (Fed. Cir. 2019) (quotes omitted) (quoting *BSG Tech*, 899 F.3d at 1290 (itself quoting *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018))). Assuming (without deciding) that the '826 Patent's method for sending emergency alerts to particular people in a particular area is directed to an abstract idea, there are two factual disputes underlying the inventive concept inquiry that make it impossible to hold it patent-ineligible as a matter of law.

First, step two of the *Alice/Mayo* test requires courts to ask whether any of the individual elements of the patent claim includes an inventive concept — *i.e.*, involving "more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry." *Berkheimer*, 881 F.3d at 1367 (quoting *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (itself quoting *Alice*, 573 U.S. at 225)). Those are questions of fact. *Aatrix Software*, 882 F.3d at 1128; *Berkheimer*, 881 F.3d at 1368.

Even if some of the technologies referenced in the '826 Patent had been defined or first used elsewhere, whether they were "well-understood," "routine," or "conventional" is disputed. For example, Defendant argues that because the Patent's specification mentioned GPS only once, "this can only plausibly mean that the patent applicant drafted the specification understanding that a person of ordinary skill in the art knew what GPS was, how to include it on a mobile device, and that using it for the purposes disclosed in the patent was routine, conventional, and wellunderstood." Def.'s Suppl. at 3 (quoting Beteiro, 104 F.4th at 1358). In contrast, Plaintiff alleges that the '826 Patent relies on GPS technology that may have existed when the Patent was filed but did not enter wide use until years later. Second Am. Compl. ¶ 24; Second Am. Compl. Ex. 3, at 3.8 Thus Plaintiff provides a plausible, nonconclusory argument "identify[ing] specific facts that need development and explain[ing] why those circumstances must be resolved before the scope of the claims can be understood for § 101 purposes." Trinity Info Media, LLC v. Covalent, Inc., 72 F.4th 1355, 1361 (Fed. Cir. 2023); see Beteiro, 104 F.4th at 1357. I therefore cannot infer, from the pleadings alone, that the Patent relies on common pre-existing activity. See Cellspin, 927 F.3d at 1317-18.

Relatedly, there are questions about whether the prior uses of multicasting, dynamic definition of a coverage area, and GPS technology are the same as those claimed in the Patent. The government argues that each technological element in the

⁸ To the extentthe government argues about whether the Patent's claims cover uses of particular other technology, *see*, *e.g.*, Tr. at 70, those are questions of claim construction that involve underlying questions of fact. *See Teva Pharms. USA*, *Inc. v. Sandoz*, *Inc.*, 574 U.S. 318, 326–27 (2015). Resolving such questions of facts on the pleadings alone is inappropriate on a motion to dismiss.

Patent's claims were known "generic components and techniques," Def.'s Mot. at 4, and points out that there were references in the '826 Patent application to prior art, see, e.g., Def.'s Mot at 14, 18–19, 25, 31. Plaintiff alleges, though, that the '826 Patent contains innovations in how those components were used. Second Am. Compl. ¶¶ 8–25; Pl.'s Opp. at 23–25; Pl.'s Suppl. at 2; Tr. at 97. While the Court may rely on statements in the specification, such as descriptions of methods that existed in the prior art, to conclude that the Patent relies on existing technology, there may still be room for Plaintiff to show that the method is nonetheless an inventive concept. See Mobile Acuity, 110 F.4th at 1294–95. Discerning whether uses of GPS, multicasting, or other technology in prior art are distinct from those uses claimed in the '826 Patent for the purposes of Alice/Mayo is likely to require factual findings inappropriate for the pleadings stage. See Cellspin, 927 F.3d at 1317–18; see also Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 331–32 (2015).

Second, step two of the *Alice/Mayo* test also requires considering whether the "ordered combination" of all the individual claim elements of the '826 Patent itself constitutes an innovative concept. *BASCOM*, 827 F.3d at 1347; *Alice*, 573 U.S. at 217–18. The ordered combination can, through "the non-conventional and nongeneric arrangement of known, conventional pieces," become an inventive concept when the patent describes how that "particular arrangement of elements is a technical improvement over prior art," *BASCOM*, 827 F.3d at 1350, or combines the conventional components in an unexpected manner, *see Trinity Info Media*, 72 F.4th at 1366–67. Even if GPS had been used in the past to define coverage areas, and if multicasting had been used to transmit alarms before, whether the combination or integration of these technologies is inventive presents another factual question. *See Cellspin*, 927 F.3d at 1318; *BSG Tech*, 899 F.3d at 1290.

That question is disputed as well. At most, the government points out an instance where GPS was used to find a coverage area, Def.'s Reply 15–16 (citing Patent Cooperation Treaty Application No. US07/77409), and another where cell coverage areas and multicasting are used, see Def.'s Mot at 14, 25, 31; see also Pl.'s Opp. at 3. But Plaintiff alleges that "the claimed combination as an ordered whole [was] not well-understood, routine, or conventional activity," Second Am. Compl. ¶ 11; see id. ¶¶ 21, 25; Pl.'s Opp. at 24–25, and explains that technology for implementing the system — i.e., assisted GPS in mobile phones — was not widely used until the mid-2010s, see Second Am. Compl. ¶ 24. Those factual allegations preclude resolving inventiveness against Plaintiff on the pleadings. See Cellspin., 927 F.3d at 1317; Aatrix Software, 882 F.3d at 1126–27.

CONCLUSION

For the foregoing reasons, Defendant's Motion to Dismiss is **DENIED**.

IT IS SO ORDERED.

s/ Stephen S. Schwartz STEPHEN S. SCHWARTZ Judge